

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	N NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,086	07/11/2001		Yukio Ichikawa	33791	6838
116	7590	02/09/2005		EXAMINER	
PEARNE & 1801 EAST 9			BHATTACHARYA, SAM		
SUITE 1200	III SIKE		ART UNIT	PAPER NUMBER	
CLEVELANI	O, OH 4	4114-3108	2687		

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	n No.	Applicant(s)				
		09/889,086	3	ICHIKAWA ET AL.				
	Office Action Summary	Examiner		Art Unit				
		Sam Bhatt	acharya	2687				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)[🛛	Responsive to communication(s) filed on 21 July 2004.							
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ Th	nis action is no	n-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims .								
5)□ 6)⊠ 7)□	<ul> <li>Claim(s) 1-10 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>Claim(s) is/are allowed.</li> <li>Claim(s) 1-10 is/are rejected.</li> <li>Claim(s) is/are objected to.</li> <li>Claim(s) are subject to restriction and/or election requirement.</li> </ul>							
Applicati	on Papers							
<ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>								
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
2) Notice 3) Information	t(s)  se of References Cited (PTO-892)  se of Draftsperson's Patent Drawing Review (PTO-948)  mation Disclosure Statement(s) (PTO-1449 or PTO/SB/0  sr No(s)/Mail Date	,,	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Application/Control Number: 09/889,086 Page 2

Art Unit: 2687

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 2. Claims 1 and 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Yoshida et al. (JP Patent 11-312285, Machine Translation).

As to claim 1, Figures 1-3 in Yoshida show an on-vehicle communication system including first radio communication means 23 for transmitting predetermined data having state information in the detection of an abnormal state, the predetermined location information and a terminal ID to an information service center on occurrence of a predetermined event,

wherein said on-vehicle communication system comprises an on-vehicle terminal main unit and a mobile terminal 36 detachable from said on vehicle terminal main unit,

wherein said mobile terminal 36 includes voice communication means 36,

wherein said on vehicle terminal main unit and said mobile terminal can communicate with each other via second radio communication means 35; and

wherein said mobile terminal 36 on completion of transmission of the predetermined data by the first radio communication means 33 to the information service center 2, performs voice communications with the information service center via said on vehicle terminal main unit with the second radio communication means 35 ("when an emergency occurs in a vehicle due to accident, etc., the detailed content of the accident is notified to an emergency aid center by first

Art Unit: 2687

executing the position information of own vehicle, accident information, and furthermore, such emergency information as vehicle ID and crew ID information, etc., stored in advance are notified through radio data communication by a first radio transmission means 33, and automatically switching the data communication to voice communication by a second radio transmission means 35, when the data communication is completed" (Abstract). See also paragraphs [0013] to [0015] for detailed description of Figures 1-3).

As to claim 6, Figure 5 in Yoshida shows an information service center comprising: means for distinguish information whether the information is transmitted from said on vehicle terminal main unit or the information is transmitted from said mobile terminal when said service center receives and restores information transmitted from a plurality of types of onvehicle communication system according to one of Claim 1 through Claim 5 to location information of each point according to a predetermined communication protocol ("in the emergency relief center 2, the emergency intelligence transmitted in data communication form is received with a communication control means 52 to control the exchange through the 51 casks of means-of-communications exchange. The communications control means 52 is controlled to be able to perform cutting control of a circuit by communications control means 52 while decoding the emergency intelligence first transmitted in data communication form and specifying the content of accident" (paragraph [0026]). "Subsequently, the end of data communication is detected with the communications control means 52, and ACK is returned to emergency relief center side empty-vehicle both sides. CPU41 by the side of vehicles detects this ACK, in a vehicle's side, the 2<sup>nd</sup> radio-transmission means 35 is operated and an automatic change is carried out to speech communication" (paragraph [0027])).

Application/Control Number: 09/889,086 Page 4

Art Unit: 2687

#### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 2-5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-312285 to Yoshida et al. in view of Tognazzini (U.S. Patent 5,914,675).

As to claim 2, the Yoshida reference discloses the on-vehicle communication system according to claim 1. However, it does not disclose the system further comprises location information detecting means as a function of said mobile terminal. The Tognazzini reference discloses "the GPS receiver 16 may be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an integrated wireless telephone having the GPS receiver 16" (Col. 4, lines 30-33).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida wherein the system further comprises location information detecting means as a function of said mobile terminal, as taught by Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 3, the Yoshida reference discloses the on-vehicle communication system according to claim 1. However, it does not disclose the mobile terminal further includes a function of the state sensor means. The Tognazzini reference discloses "the GPS receiver 16 may

be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an integrated wireless telephone having the GPS receiver 16" (Col. 4, lines 30-33). "The emergency locator device includes a GPS receiver interface, a crash sensor or manual triggering device" (Col. 3, lines 65-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida wherein the mobile terminal further includes a function of the state sensor means, as taught by Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 4, the Yoshida reference discloses an on-vehicle communication system according to claim 1. However, it does not disclose the mobile further includes functions of the location information detecting means and the state sensor means. The Tognazzini reference discloses "the emergency locator device includes a GPS receiver interface, a crash sensor or manual triggering device" (Col. 3, lines 65-67). "The GPS receiver 16 may be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an integrated wireless telephone having the GPS receiver 16" (Col. 4, lines 30-33).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida wherein the mobile further includes functions of the location information detecting means and the state sensor means, as taught by Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 5, the Yoshida reference discloses an on-vehicle communication system according to claim 1. However, it does not disclose means for detecting a relative distance

between said on-vehicle terminal main unit and said mobile terminal, wherein said means switches a main system for communications of said on-vehicle communication system. The Tognazzini reference teaches means for detecting a relative distance between an on-vehicle terminal main unit and a mobile terminal, wherein said means switches a main system for communications of said on-vehicle communication system ("FIG. 2B is a flow diagram illustrating the operations of the control processor 24b in the emergency receiver system. The receiver system 12 may be implemented as a portable handheld telephone device having an LCD display 64 for use by rescue personnel" (Col. 8, lines 59-63). "The system 12 may use advanced calling operations of the telephone network 20, for example, conferencing capabilities to enable simultaneous conversations between the rescuers and the users of the emergency locator device 10" (Col. 9, lines 7-11). "As recognized in the art, the control processor 24b may also access digital map databases to provide a geographical and/or topographical display of a region of a crash site on the display 64 based upon the received GPS data" (Col. 9, lines 23-26)).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida to have means for detecting a relative distance between an on-vehicle terminal main unit and a mobile terminal, wherein said means switches a main system for communications of said on-vehicle communication system, as taught by Tognazzini, in order to help rescuers in locating the area/region of a crash/emergency and in communicating with users of the on-vehicle communication system in an emergency.

As to claim 7, as cited in claim 1, Figures 1-3 in Yoshida show an on-vehicle communication system including location information detecting means 22; state sensor means 21 for detecting an abnormal state and outputting state information; means 24 for recording location

Art Unit: 2687

information having time information and latitude/longitude information of the location information obtained by the location information detecting means 22 at each point; first radio communication means 23 for transmitting predetermined data having the state information, the predetermined location information and a terminal ID to an information service center 2 on occurrence of a predetermined event; and voice communication means 36,

wherein said on-vehicle communication system comprises an on-vehicle terminal main unit and a mobile terminal 36 detachable from said on-vehicle terminal main unit, and wherein said mobile terminal 36 includes voice communication means 36, and wherein said on-vehicle terminal main unit and said mobile terminal can communicate with each other via second radio communication means 35.

However, it does not disclose the mobile terminal includes data retaining means for temporarily storing data and the data retaining means temporarily stores data updated as required while the vehicle is traveling. The Tognazzini reference (Figure 1) discloses "the GPS receiver 16 thus determines a current location of the emergency locator device 10 within an accuracy of +/-100 meters and supplies the current location information to the GPS interface 14 for storage in memory" (Col. 4, lines 54-57). "If the received data is GPS data, the control processor 24a accesses the previously-stored GPS data from the memory 38a in step 104, and compares the received GPS data with the stored GPS data in step 106. If the variations between GPS data indicate that the device 10 has moved at least a predetermined distance, for example, a distance L=100 meters, the control processor 24a updates the memory 38a in step 108" (Col. 7, lines 24-32).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida wherein the mobile terminal includes data retaining means for temporarily storing data and the data retaining means temporarily stores data updated as required while the vehicle is traveling, as taught by Tognazzini, so that if the mobile terminal becomes separated from the vehicle during a crash, the control processor in the mobile terminal can still provide location and vehicle status information to rescue teams by accessing the memory.

As to claim 8, Yoshida-Tognazzini discloses the on-vehicle communication system according to claim 7. The Tognazzini reference further discloses the data retaining means stores higher priority emergency information data to be transmitted to the information service center, and the emergency information data stored in the data retaining means can be taken out of the vehicle together with said mobile terminal in the event of an emergency ("the GPS receiver 16 thus determines a current location of the emergency locator device 10 within an accuracy of +/-100 meters and supplies the current location information to the GPS interface 14 for storage in memory" (Col. 4, lines 54-57). "Finally, the telephone portion of the emergency locator device 10 and the emergency receiver each include a non-volatile memory 38 that stores a predetermined number corresponding to a rescue station" (Col. 5, lines 20-23). "If the emergency locator device 10 becomes separated from the rest of the vehicle during a crash, the control processor 24a can still provide location and vehicle status information to rescue teams by accessing the memory 38a" (Col. 5, lines 56-60)).

As to claim 9, Yoshida-Tognazzini discloses the on-vehicle communication system according to claim 8. The Yoshida reference further discloses the on-vehicle communication

Art Unit: 2687

system makes voice communication with the information service center after transmitting the emergency information data to the information service center from the mobile terminal ("when an emergency occurs in a vehicle due to accident, etc., the detailed content of the accident is notified to an emergency aid center by first executing the position information of own vehicle, accident information, and furthermore, such emergency information as vehicle ID and crew ID information, etc., stored in advance are notified through radio data communication by a first radio transmission means 33, and automatically switching the data communication to voice communication by a second radio transmission means 35, when the data communication is completed" (Abstract). "The 2<sup>nd</sup> radio-transmission means 35 is connected to a handset (or hand free set) 36" (paragraph [0015], line 6)).

As to claim 10, Yoshida-Tognazzini discloses the on-vehicle communication system according to claim 9. The Tognazzini reference further discloses communications from the mobile terminal to the service center are made via a communication apparatus different from said on-vehicle communication system associated with said mobile terminal, the communication apparatus existing in the close proximity of said mobile terminal ("the portable device 10 may also be used as a conventional wireless telephone during normal operations" (Col. 8, lines 48-50). "The telephone portion of the emergency locator device 10 and the emergency receiver each include a non-volatile memory 38 that stores a predetermined number corresponding to a rescue station" (Col. 5, lines 20-23). "Upon the detection of an emergency trigger, the emergency locator device automatically places a wireless telephone call to a predetermined emergency number and supplies the stored location data and vehicle condition data" (Col. 10, lines 47-51). "If the emergency locator device 10 becomes separated from the rest of the vehicle during a

Art Unit: 2687

crash, the control processor 24a can still provide location and vehicle status information to rescue teams by accessing the memory 38a" (Col. 5, lines 56-60)).

### Response to Arguments

1. Applicant's arguments filed 7/21/04 have been fully considered but they are not persuasive.

Applicant argues that nothing in Yoshida discloses that the hand set 36 is detachable from the cellular phone unit 32. Examiner respectfully disagrees. The cellular phone unit 32 is part of a vehicle. The hand set 36 (which can also be hands-free) is connected to the second radio transmission means 35 through a circuit changing switching. Since the second radio transmission means 35 is part of the cellular phone unit 32, at least some part of the hand set 36 is detachable from the cellular phone unit 32. See drawing 3 and paragraph [0016].

Applicant argues that Tognazzi does not disclose that the portable locator device 10 includes a function of a state sensor means. Examiner respectfully disagrees. Tognazzi states that the "emergency locator device includes a GPS receiver interface, a crash sensor or manual triggering device." See col. 3, lines 65-67. Since the crash sensor is a state sensor means, the portable locator device includes a function of a state sensor means.

Applicant argues that Tognazzi does not disclose detecting a relative distance between an on-vehicle terminal main unit and the portable locator device 10. Examiner respectfully disagrees. Tognazzi discloses a control processor that accesses digital map databases to provide a geographical display based on received GPS data. The GPS system of Tognazzi can be used to

detect the relative distance between an on-vehicle terminal main unit and the portable locator device.

#### Conclusion

2. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Bhattacharya whose telephone number is (703) 605-1171. The examiner can normally be reached on weekdays 8:30 a.m. to 6:00 p.m., first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (703) 305-3016. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/889,086 Page 12

Art Unit: 2687

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sb